

Exhibit 3



Definition of Connected Car – What is the connected car? Defined



A big buzz word in the automotive and car industry is now “connected car.” Many people have asked us at [AUTO Connected Car](#), “What is the connected car?” What was the first connected car? “What is the definition of the connected car?” “What is driving the connected car movement?” “Can I connect the Internet of things to my present un-connected car?”

The First Connected Cars

What were the first connected cars on the market?

The first connected cars were made by General Motors Working with Motorola Automotive when they introduced OnStar in 1996. That was at a time when cellular voice connections were not reliable and GM wanted to create a safety product. The telematics system first enabled voice calls to a call center that contacted emergency responders in the case of accidents with Cadillac (DeVille, Seville and Eldorado) when an airbag was deployed.

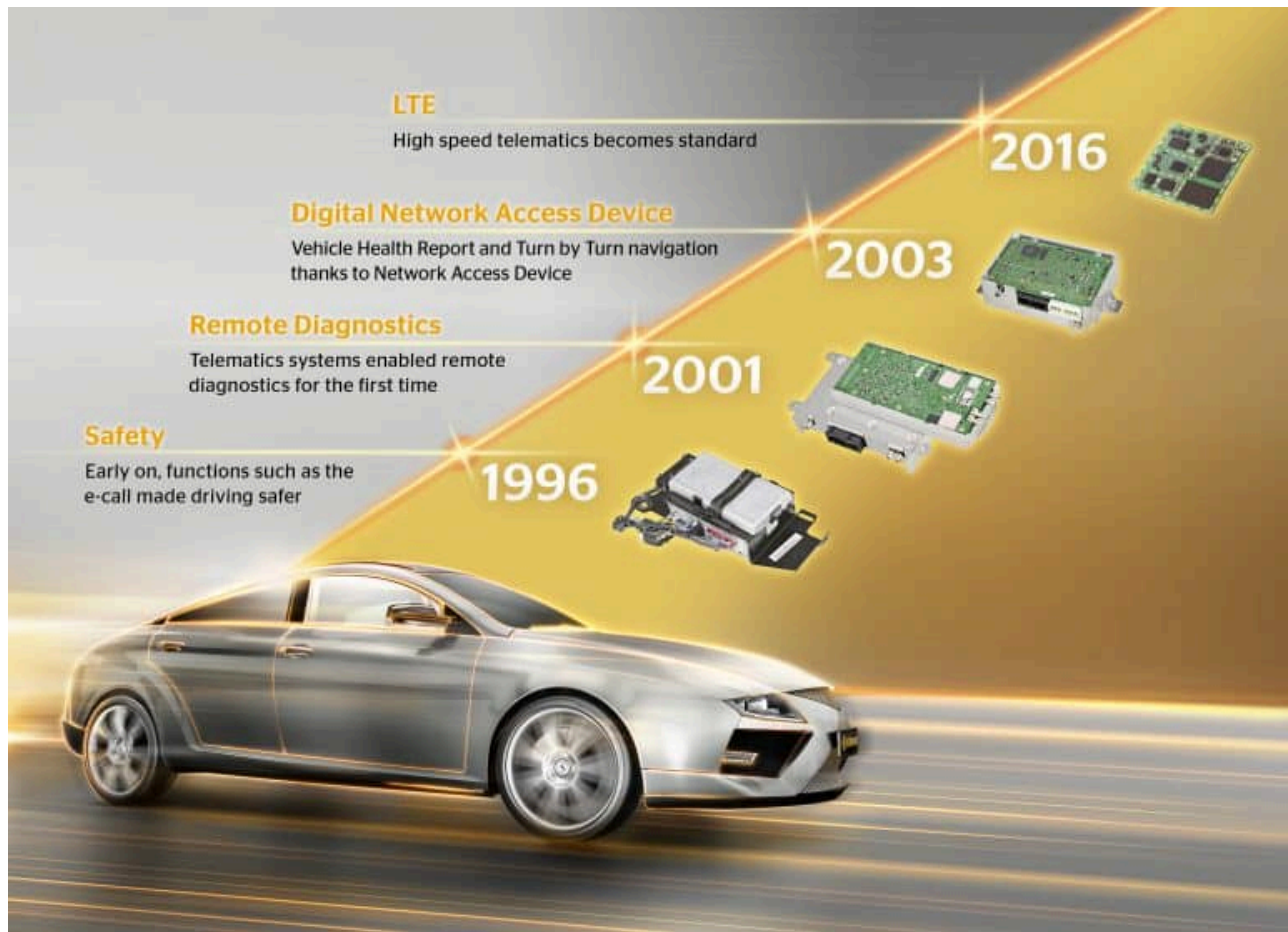
The connected car safety systems added capabilities over time including GPS locations and the ability to have voice and data at the same time. After the success of OnStar many automakers followed with similar safety programs connecting the car to emergency responders.

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In 2001 remote diagnostics was introduced. 2003 marked the introduction vehicle health reports, turn-by-turn directions and a network access device. In 2007 Continental introduced data-only telematics. In the summer of 2014 Audi A3 was the first automaker to offer 4G LTE Wi-Fi Hotspots access and the first mass deployment of 4G LTE was by General Motors.

By 2015 OnStar had processed 1 billion requests from customers. Today the history of connected cars continues to evolve and are many types of connected cars with more advanced safety features.



Connected Car Definition

What is the definition of a connected car? it changes as more and more products are launched.

Connected Car (definition)- the presence of devices in an automobile that connect the devices to other devices within the car/vehicles and or devices, networks and services outside the car including other cars, home, office or infrastructure. Internet access is usually connected to a local area network. Many experts are saying that connected cars are part of the giant Internet of Things.

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Internet connections can provide connections that warn of traffic, collisions and other safety alerts. Concierge services from apps or automakers alert the driver of the time to leave to arrive on time from a calendar and sends text message alerts to friends or business associates to alert them of arrival times. For example, **BMW Connected** NA.

Connected car features fall into several categories, safety, navigation, infotainment, diagnostics/efficiency and payments.

Connected Car Functions Features

Typically, a connected car after 2010 or thereabouts has an head-unit, infotainment unit, in-dash system with a screen from which the operations of the connections can be seen or managed by the driver. Kinds of systems that can be connected are:

Infotainment

- **music/audio**, podcasts, Internet radio via various devices such as smartphone or Internet-enabled tablet. There are apps that **play music** according to your mood.
- **smartphone/iOS/Android** and proprietary applications or **apps**.
- **voice commands and hands-free controls** – often the head unit will respond to voice commands, such as “Play my song.” and more sophisticated options may be Siri-Style such as “Navigate to nearest gas station.
- **Bluetooth** – this wireless connectivity typically allows the driver to use Bluetooth to a cellular phone or smartphone to make and receive phones. Often there is microphone located near the driver so that the driver can speak and the voice of the caller is played through the speakers of the car. Bluetooth can also be used to

stream music from a Bluetooth connected device such as an iPod, iPhone, smartphone or Bluetooth-enabled tablet or iPad.

- **4G Wi-Fi hotspots** – GM starting with the Chevy Malibu 2015 model in June 2014 is offering 4G LTE in all its cars. The Audi A3 is the technically the first 4G LTE connected car in the US. Volvo will also offered 4G LTE from AT&T in the summer of 2014.
- **contextual help/offers** – a new arena in the connected is the computer system learns the driver's preference and then offers assistance, such as when the gas tank is low, shows nearby gas stations. Voice commands are tailored to the user as in the case with SYNC 2, the driver says "I'm hungry" and nearby restaurants are displayed.

Safety

- **road side assistance** – the most popular and well-known service is On Star, in which agents help drivers in cases of accidents or other dangers by contacting authorities and rescue workers depending upon the need. Studies have proven that emergency call services prevent injuries and collision avoidance systems reduce claims.
- **traffic, safety and collision warnings** – when the car is connected to navigation, city infrastructure or community mapping such as Waze, HERE or TomTom, the driver can be notified of car collisions, traffic jams, pot holes, debris on the road and more. The car can communicate various ways to other devices such as Vehicle-to-Vehicle(V2V), Vehicle-to-Infrastructure(V2I), Vehicle-to-Pedestrian/Phone (V2P) or Vehicle-to-Everything (V2X) for sophisticated information such as platooning or changing lights when there are no other cars at the same time.

Diagnostics Efficiency

- **automobile diagnostics** – systems can alert the driver to needed servicing and problems with the car itself.
- **predictive prognostics** – a new feature first from GM. Car owners receive warnings when the starter motor, fuel motor or battery are about to fail
- **health reports** – owners receive health reports
- **parking apps** – parking apps using a smartphone, locate and may pay for parking nearby.
- **Other services** –steering for parking, engine-style-controls and other ADAS features.

- **remote apps** – remote features such as remote start, remote door opening/closing, remote A/C to cool or heat the car, car locations, geo-fencing, alerts, teen or elderly monitoring and valet monitoring.

Navigation

- **navigation** either through a smartphone/iPhone application or through a built-in GPS navigation system.
- **leave alerts & text alerts** – when connected to apps outside the car, the driver can receive notification of the best time to leave, while the car or apps notify friends or colleagues of the arrival time of the vehicle.
- **real-time traffic** – guidance using real-time traffic and situations.
- **real-time weather** – notifications of bad weather as it happens.
- **payments from dash**– the ability to pay for items without leaving the vehicle.

Payments– GM was the first automaker in the U.S. to launch payments from the dash through Marketplace for donuts, coffee and other fast foods. Then drivers of eligible Chevrolet vehicles could pay through the touchscreen in their vehicle when they fuel up at participating Shell-branded stations, without swiping a credit card or using a mobile device. Hyundai then announced that it will enable payments through Xevo.

Still in the announcement phase the idea is that the driver doesn't have to leave the car to pay for gas or other services. DocuSign and Visa showcased a new proof-of-concept that brings together secure contracts and payments made online via a connected car.

Currently there is no one dominate operating system for the computers of head unit or other devices that connect to iPhone or Android that include **Airbiquity**, **QNX**, **Mirrorlink**, **WEBLINK**, and others. **QNX** has the most market share. Earlier in 2014 the Open Automotive Alliance based on the Android operating system provided by **Google** was formed.

MirrorLink is system from the Car Connectivity Consortium where what shows on the smartphone appears on the in-dash screen, that currently offers LBS locator Glympse and Parkopedia.

Apple announced **CarPlay** in March 2014 which runs on the iPhone 5/5c/5S via a lightning cable with a larger view of icons that works with Siri. By 2017 model year, CarPlay is deployed by **Hyundai**, Ferrari, Mercedes-Benz, **Volvo**, Ford, Honda, almost all GM, Buick and Cadillac models, BMW and more.

Google revealed Android Auto in June 2014, a system for Android smartphone similar to CarPlay that uses voice commands and steering wheel buttons. Car makers that will deploy **Android Auto** include Hyundai, Volvo, Honda and others.

Another competitor to CarPlay is **WEBLINK**. **QNX** is a popular OS for the backend to run connected car systems with safety certification.

After Market Connected Car Market

If you like many people don't wish to buy a new car, every year for new technology, currently there are many after market solutions for in-dash systems, Bluetooth and navigation that will work with late model cars. Makers of these devices include Kenwood, **Alpine**(with CarPlay), **Pioneer** (with CarPlay), Dual and **Delphi**.

After market diagnostic systems include **Automatic** and **dash App**.

The Future of Connected Cars

The next phase of connected cars through the 20-teens is when cars connected to services and information outside of the car including but not limited to the following:

LTE data connections & Wi-Fi to passengers – **AT&T** in the spring of 2014 announced services in which drivers can add their car with LTE to their AT&T mobile share plans. The

connection to LTE enables passengers to perform web surfing and connected apps. It also allows for the app in the head/dash unit to connected to data services such as stream audio services like Pandora, iHeart Radio and Slacker Radio. 4G LTE in the United States will is available in GM (Chevy, Buick, Cadillac) cars via OnStar. HSPA+ connectivity is available in Tesla and Volvo from AT&T. More car makers may find a demand for 4G LTE connectivity, because it will enable them to update software over-the-air. Verizon Wireless is expected to offer 4G LTE to (Hyundai) in the future.

Vehicle-to-Vehicle (V2V) and Vehicle-to-Infrastructure – for the everything from traffic management to stopping a car from entering a dangerous intersection, V2V and V2I are communications systems that interact for the safety of the auto and its surrounding environment. The U.S. Department of Transportation is working on guidelines to enable V2V systems that connect to municipalities and for safety and better traffic control.

Research on V2V is being done by the University of Michigan Ann Arbor.

Systems to Show Offers Based on Driver Behavior

Super contextual preeminent help/suggestions/offers As this field grows, services that may be offered are automated text messages to a spouse or family member when the traffic going home is bad or coffee discount coupons in the morning on your way to work or even travel/hotel offers when you drive to different cities.

Automated-Automatic-Auto-Piloted-AUTO-Mobiles-AUTO-Connected-Car

After cars has the correct sensors and connections it is possible in the future that cars were mainly drive themselves and the human driver will take over the wheel only when necessary. This realm is also called “robotic vehicles.” In September, 2104, GM announced the first semi-automated connected car coming with Super Cruise in **Cadillacs in 2017**.

Vehicles such as the Ford auto-driving **research car** and the **Renault Kwid** are few examples of research and concept vehicles that may drive themselves.

Other companies working on autonomous cars include **Nissan, Volkswagen, Peugeot**, and other. Polls show people many people are not ready to **driverless cars**. Research shows that **Google and IBM will profit**. Driverless cars use **ADAS** features to drive the car.

This relates to the field of **predictive driving systems** to shorten response time for controlling aspects of the vehicle.